Claims

1. A method for managing the processing of an agricultural product, the method comprising:

storing a raw material in a storage container;

physically processing the stored raw material in the storage container to obtain a processed material based on the raw material;

recording link data for associating the raw material with the processed material across any transformation between of the raw material and the processed material; and

providing a graphical user interface to facilitate at least one of entry, storage, retrieval, and data processing of the recorded link data for management of at least one of the raw material, the processed material, and at least one storage container.

2. The method according to claim 1 wherein the processing comprises blending the stored raw material with another material to obtain a target trait value of the blended, processed material.

3. The method according to claim 1 wherein the processing comprises blending multiple stored raw materials together in defined proportional quantities to form the processed material.

4. The method according to claim 1 wherein the processing comprises coordinating movements of raw material, processed material, and any derivatives of raw material and processed material among storage containers.

5. The method according to claim 1 wherein the storage container is associated with a storage identifier, each raw material associated with the storage identifier having material attributes, the material attributes including one or more of the following: quantity of stored material, protein content, total weight, moisture, foreign matter, defects, color, material identifier, material variety identifier, blend identifier, and

mixture identifier.

6. The method according to claim 1 wherein the providing comprises providing a graphical representation of a storage site associated with the at least one storage container.

7. The method according to claim 1 wherein providing comprises providing a graphical representation of a top view of a storage site associated with the at least one storage container, each storage container have an associated storage identifier, each storage container associated with a status indicator, a content indicator, or both.

8. The method according to claim 1 wherein the at least one storage container and associated information on any material therein is assessable to a defined access list of user identifiers.

9. The method according to claim 1 wherein providing comprises providing a user with a software drawing tool to form a map, schematic representation or other diagram of a storage site and various storage containers at the storage site.

10. The method according to claim 1 wherein the processing step supports automatically naming receptions, blends, mixes, and transfers of any material to or from the storage container.

11. A method for managing processing of an agricultural product, the method comprising:

receiving a raw material in a storage container;

processing the stored raw material in the storage container to obtain a processed material based on the raw material;

recording link data for associating the raw material with the processed material across any transformation between the raw material and the processed

material; and

providing a graphical user interface to facilitate at least one of entry, storage, retrieval, and data processing of the recorded link data for management of the storage containers.

12. The method according to claim 11 further comprising the step of:

shipping the processed material from the storage container to a destination location.

13. The method according to claim 11 wherein the processing comprises combining the raw material with one or more agricultural products, each agricultural product associated with an attribute value to impact a resultant attribute value of the processed material.

14. The method according to claim 11 wherein the processing comprises combining the raw material with one or more agricultural products, each agricultural product associated with a protein content, a moisture content, a damage parameter, and a foreign material parameter, such that the processed material complies with at least one of a target protein content, a target moisture content, a target damage parameter, and a target foreign material parameter.

15. The method according to claim 11 wherein the graphical user interface provides a graphical representation of one or more storage containers located at a location, each storage container associated with a content identifier for identifying contents of the respective storage container, a quantity for indicating the quantity of the contents of the respective storage container, and at least one attribute value of the respective contents of the storage container.

16. The method according to claim 15 wherein the content identifier provides a visual indication of an identity of the contents of a corresponding storage container.

17. The method according to claim 11 wherein the graphical user interface provides a graphical representation of one or more storage containers located at a location, each storage container associated with a content identifier for identifying contents of the respective storage container, a quantity for indicating the quantity of the contents of the respective storage container, a protein content of the respective contents of the storage container, a moisture content of the respective contents of the storage container, damage indicator of the respective contents of the storage container, foreign material content of the respective contents of the storage container, and the total weight of the contents of the storage container.

18. The method according to claim 11 further comprising keeping an event history for a corresponding storage container, the event history comprising an operation, a temporal indicator, operator identifier, and comments.

19. The method according to claim 11 further comprising keeping an event history for a corresponding storage container, the event history containing an operation selected from the group consisting of aeration of at least one of the materials, inbound receipt of at least one of the materials, outbound shipment of at least one of the materials, rotating contents of the storage container, and cleaning the storage container.

20. The method according to claim 11 wherein the processing comprises combining the raw material with a first attribute value with another material with a second attribute value to obtain a processed material with a resultant attribute value that has an intermediate value between the first attribute value and the second attribute value.

21. The method according to claim 20 wherein the attribute value is selected from the group consisting of a protein content, moisture content, damage parameter, and a foreign material content.

22. The method according to claim 11 wherein the processing comprises milling grain as the raw material and wherein the processed material comprises flour.

23. The method according to claim 11 wherein the processing comprises combining a raw material as the grain with one or more additional constituent materials to obtain flour with a desired target attribute value as the processed material.

24. A system for managing the processing of an agricultural product, the system comprising:

a transaction manager for storing data on physically processing stored raw material in a storage container to obtain a processed material based on the raw material;

a data storage manager for recording link data for associating the raw material with the processed material across any transformation between the raw material and the processed material; and

a graphical user interface to facilitate at least one of entry, storage, retrieval, and data processing of the recorded link data for management of at least one of the materials and the storage container.

25. The system according to claim 24 further comprising a definer for defining a graphical bin representation that represents one or more storage containers and contents thereof, the contents of each storage container being associated with corresponding attribute values.

26. The system according to claim 24 wherein the transaction manager further comprises a receiving module for supporting an inbound receipt of an agricultural product for one or more storage containers, a processing module for monitoring the processing of the agricultural product and any transfers between storage containers, and a shipping module for supporting an outbound shipment of the agricultural product.

27. The system according to claim 24 wherein the graphical user interface provides screens for defining a storage system for receiving, storing, processing, shipping an agricultural product, and managing an inventory of the agricultural product.

28. The system according to claim 24 further comprising:

a data processing system for supporting the transaction manager and the data storage manager;

a first remote station comprising a quantity detector for detecting a first quantity of a first agricultural product stored in a corresponding first storage container and an attribute measurer for measuring an attribute of the first agricultural product;

a second remote station comprising a quantity detector for detecting a second quantity of a second agricultural product stored in a corresponding second storage container and an attribute measurer for measuring an attribute of the second agricultural product; and

a central station for receiving at least one of the first quantity, the second quantity, the first attribute, the second attribute, and the central station in communication with the data processing system.